## REMARKS

Applicants have reviewed and considered the Office Action mailed on September 20, 2006, and the references cited therewith. Applicants respectfully request reconsideration and allowance of all claims in view of the following remarks.

### *Claim Rejections - 35 U.S.C. § 112*

Claims 1-22 are pending in the application. Claims 1, 5, and 15 are amended. Claims 1-22 are rejected under 35 U.S.C. § 112 as being indefinite. Applicant is amending claims 1, 5, and 15 to comply with the written description requirement of 35 U.S.C. § 112. The amendments contain no new matter and are supported by Applicant's original specification, including Figures 2A, 2B, and 2C and paragraphs [0002] and [0021].

### *Claims 1-7, 10-17, and 19-21*

Claims 1-7, 10-17, and 19-21 are rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 6,304,268 to Iourcha et al (Iourcha).

Claims 1, 5, and 15 have been amended to clarify that the normalized texture map coordinate has a value between 0 and 1 and the unnormalized texture map coordinate has a value between 0 and the non-power of two LOD dimension minus one, as described in paragraph [0025] of the Applicant's original specification. As further described in paragraph [0026] of the specification, when conventional methods are used to compute texture map coordinates for a non-power of two texture map, the coordinate may lie outside of the texture map. Although the conventional method may produce correct texture coordinate values for texture maps that are a power of two, these same methods oftentimes do not produce correct texture values for non-power of two texture maps. The present invention, as disclosed and claimed in the independent claims, solves this problem.

Specifically, paragraphs [0027-0034] and Figures 3A, 3B, and 3C of the Applicant's original specification describe and show a method for producing texture coordinate values for non-power of two texture maps that lie within the texture map, as

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opposed to outside of the texture map. Claims 1 and 5 include the method steps for computing a texture map coordinate for a non-power of two texture map, and claim 15 includes the elements of texture coordinate computation unit 405 (shown in Figure 4 and described in paragraphs [0037-0039]) that is configured to perform those method steps.

Iourcha fails to anticipate the claimed invention, because Iourcha does not teach each and every limitation in the independent claims. For example, Iourcha does not teach anything about how to produce texture coordinate values for non-power of two texture maps. Iourcha teaches computing addresses from texture coordinate values, without describing how the texture coordinate values are actually computed. In column 5, lines 37-45 Iourcha does appear to suggest that the texture map dimensions are not limited to power of two; however, the reference simply does not provide any specific teachings or insight into how texture coordinate values should be produced for non-power of two texture maps. Importantly, all of the examples provided by Iourcha are for texture map dimensions of 512, 256, and 128, which are power of 2 values (the dimension can be represented as $2^i$, where i is an integer). As previously discussed, computing texture coordinate values that fall within the texture map is a difficult problem that conventional approaches, such as those disclosed in Iourcha, do not solve. Therefore, claims 1, 5, and 15 are patentable over Iourcha under §102.

Claims 2-4, 6-14, and 16-17 and 19-21 all depend, either directly or indirectly from claims 1, 5, and 15 and therefore, are patentable over Iourcha as well.

### Claims 8-9, 18, and 22

Claims 8-9, 18, and 22 are rejected under 35 U.S.C. §103(a) as being unpatentable over Iourcha in view of U.S. Patent No. 6,304,268 to Taylor et al. (Taylor).

Claims 8-9 and claims 18 and 22 depend from claims 5 and 15, respectively. As previously described, Iourcha fails to teach or suggest receiving a non-power of two LOD dimension and computing an unnormalized texture map coordinate for a non-power of two texture map. Taylor fails to cure these deficiencies. Although in column 23, lines 26-29 Taylor suggests that maps can be clamped to non-power of two sizes,

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Taylor does not provide any specific teachings or insight into how texture coordinate values should be produced for non-power of two texture maps.

Therefore, the combination of Iourcha and Taylor fails to teach or suggest all the limitations of the claims 8-9, 18, and 22. Furthermore, neither of these references teaches or suggests a texture map coordinate computation unit that is configured to receive a non-power of two LOD and compute unnormalized texture map coordinates for a non-power of two texture map. For these reasons, claims 8-9, 18, and 22 are patentable over the combination of Iourcha and Taylor.

## Conclusion

In conclusion, the references cited by the Examiner, alone or in combination, do not teach, show, or suggest the invention as claimed.

Having addressed all issues set out in the office action, Applicants respectfully submit that the claims are in condition for allowance and respectfully request that the claims be allowed. Applicants reserve the right to subsequently take up prosecution of the claims as originally filed in this application in a continuation, a continuation-in-part and/or a divisional application. If the Examiner has any questions, please contact the Applicants' undersigned representative at the number provided below.

Respectfully submitted,

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